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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Jonathan H. Metcalf et al.

Group Art Unit: 2876

Serial No.: 10/086,764

Examiner: Kimberly D. Nguyen

Filed: October 19, 2001

Atty. Dkt. No.: 283-0003US

For: SYSTEM FOR VENDING PRODUCTS
AND SERVICES USING AN
IDENTIFICATION CARD AND
ASSOCIATED METHODS

DECLARATION OF MR. LYN BARTH SUBMITTED PURSUANT TO RULE 132
IN SUPPORT OF CONCLUSION THAT
USP 5,722,526 ("SHARRARD") IS NOT ENABLING OF CLAIM 1

1. My name is Lyn Barth, and I live at 13102 Roundstone Ct. St. Louis, Missouri, 63146. I am 67 years of age.

2. I received my Bachelor of Science degree in electrical engineering in 1958 from Washington University in St. Louis, and a Master of Science degree in 1962 from the same University. While working on my Masters, I taught courses in basic electronics, machinery and circuits at the University, and worked for The Central Institute for the Deaf as a designer of new generation hearing aids. From 1962 through 1969 I worked for Electro-Mechanical Research,

doing design engineering for telemetry systems used on the Mercury, Gemini, and Apollo space programs, as well as for the Explorer series satellites. From late 1969 to the present I have been involved in automatic payment systems using cash, credit, card based, and more recently Internet based. Such systems usually involved connection to and activation of vending machines of the type that would be used to vend products in an unattended mode. Over these past three decades, I have become intimately familiar with the operation and design of most of the vending machines designed and produced during that time as well as the methods of providing a payment method for use with such machines.

3. I have worked as a contractor for the Assignee, Chesterfield Holdings, LLC (formerly "The Detsky Group, LLP"), in the development of a commercial vending machine capable of optical analysis of ID cards since January 1999. Embodiments of Assignee's commercial vending machine are disclosed in the present application, U.S. Patent Application Serial No. 10/086,764 (the '764 application), and in U.S. Patent Application Serial No. 10/273,574, which is a continuation-in-part of the '764 application.

4. On the basis of my technical background, and my work in assisting in the development of the vending machine product on behalf of Assignee, I submit that I am one skilled in the art of vending machines and competent to understand what one skilled in the art of vending machines implicitly understands and otherwise would need to be informed of to develop a vending machine operating under the claims of the '764 application.

5. I have been informed that claim 1 in the '764 application, as well as other claims, have been rejected because of U.S. Patent 5,722,526 ("Sharrard"), filed November 13, 1995, issued March 3, 1998, and that the patent Examiner contends that all of the limitations of claim 1 are disclosed in Sharrard and hence that claim 1 does not define a new invention.

6. I have reviewed the '764 application, and specifically claim 1, which states

1. A method for determining information about a consumer prior to enabling the vending of a good or service from a machine, comprising:
 - (a) receiving a form containing information about the consumer at the machine;
 - (b) optically analyzing the form to electronically determine information about the consumer; and
 - (c) enabling the vend on the basis of the information.

7. I have also read Sharrard in detail, and understand its disclosure for all it teaches. In the Sharrard system, a customer inputs money into a vending machine and makes his selection. Thereafter, the customer is prompted to input an identification card such as a state government issued identification card or a driver's license containing the customer's birth date. The vending machine reads the birth date on the card. A processor unit compares this data with the present date that is keyed into the vending machine by its operator, and determines whether the customer is of a sufficient age to purchase the product.

8. Sharrard mentions that the birth date can be read optically. However, Sharrard discloses no details concerning how to do this. Sharrard's only disclosure regarding optical analysis is the following sentence: "The birth date of the user would be inscribed on the card by characters capable of being read and interpreted by a optical reader" Col. 2, l. 65 to col. 3, l. 2.

9. But the actual implementation of optical analysis of an ID card in a vending machine is non-trivial, and such details were not known to those skilled in the vending machine arts at the time of Sharrard's patent, and specifically as of the time the Sharrard patent was filed in 1995. Instead, given the level of description concerning how to perform optical analysis of cards in Sharrard (or more accurately, lack thereof), one skilled in the art would have had to expend an inordinate amount of time trying to implement Sharrard's suggestion of optical analysis for a vending machine. The experimentation required to develop a working optical analysis system would be undue given Sharrard's lack of guidance as to any of the technical details.

10. As proof that it is a non-trivial matter for one skilled in the art to implement such a system, it should be noted that Assignee has worked on developing a working optical analysis system for a vending machine for approximately 2 years off-and-on during the time period of January 1999 to October 2003, and work still continues to improve the system.

11. During the development of an optical analysis vending machine system, several different unique technical details had to be addressed that were not within the purview of a skilled vending machine artisan, and which therefore show that Sharrard's disclosure was inadequate to enable one skilled in the art to make a working optical analysis system. For example, standard card readers had to be modified to provide optical sensing capabilities. The optical card reader needed to be physically and electrically integrated with a standard vending machine, and/or such standard vending machines had to be redesigned to accompany such a card reader. Optical analysis algorithms had to be developed to address issues concerning, for example, form identification (whether a proper form had been inserted that was recognizable by the machine),

for authentication, and form misalignment (dealing with the problem of pixel shifts). Moreover, such algorithms had to be modified so that they would work suitably quickly in a vending machine application. In this regard, implementation of the optical card reader could not have been reasonably effected in 1995 at the time Sharrard filed for his patent because the speed of microprocessors had not yet been developed such that reading and decoding consumer information could have been accomplished in any reasonable time in a practical vending situation.

12. All in all, Assignee has spent through its agents hundreds of hours engineering their optical analysis vending machine system to get it to function adequately for commercial use. This all shows that development and implementation of a working optical analysis vending machine such as covered by claim 1 of the '764 application required consideration of many technical details not known to skilled vending machine artisans and not disclosed in the Sharrard reference.

13. I know of no other prior art references other than Sharrard that disclose the implementation of optical analysis of forms in the vending machine arts. Optical analysis in the vending machine arts is an emerging technology, which requires difficulty and skill to implement over and beyond what is known to typical artisans in this industry. Therefore, one of ordinary skill in the art of vending machines, reading Sharrard, could implement an optical analysis system only through significant (i.e., undue) experimentation because necessary technological considerations such as those outlined above would have been unknown to artisans practicing in that art.

14. In short, as one skilled in the vending machine arts, I do not believe that Sharrard disclosed sufficient technical details to allow one skilled in the vending machine arts to develop an optical card analysis system without undue experimentation. Sharrard did not disclose sufficient technical details to put the public in possession of a working optical card analysis system for a vending machine such that one skilled in the art could make and use such a system without undue experimentation.

15. I set forth the foregoing as a true and accurate statement of my belief of the facts, subject to the penalty of perjury.

Respectfully submitted,

Lyn Barth: Lyn Barth

Date: Jan 7, 2004